REPLY COMMENTS OF STEPHEN WHITAKER, MONTPELIER, VERMONT

FCC
PS Docket 19-254
October 11, 2019

QPP = **Q**uality (of service), **P**riority and **P**reemption

Interoperability with QPP for FirstNet eligible cellular subscribers should be specified in all LTE roaming agreements, and roaming agreements among LTE carriers should be required, especially in rural areas where many carriers lack consistent cellular coverage altogether, and individual carriers' coverage is sparse at best.

Vermont, having three infrastructure based LTE carriers, is uniquely positioned to economically and quickly pilot and demonstrate effective FirstNet interoperability. The consideration of our small state, with a mostly rural geography, the difficult topography, the nimble regulatory environment wherein infrastructure hardening to public safety grade might be accomplished under the shared jurisdiction of wireless regulation when 911 emergency calling is implicated, all support these proposals.

Were Vermont Telephone Company to have such provisions in their new roaming agreement with AT&T, and then enter a similar roaming agreement with Verizon, first responders subscribing to any of these three Vermont 4G/LTE networks would maintain all eligible subscribers' QPP regardless of whose macro cell tower or microcell was being connected through, and equally importantly, emergency communications cell connectivity would be maintained were either of the Verizon or AT&T dedicated public safety cores to fail or become inoperable. i.e. FirstNet fail-over!

This is not rocket science.

Technically speaking, the following explanation is offered as the technical feasibility basis for expediting the proposed interoperability pilot project in Vermont.

> "The full set of data is sent on the roaming signaling connections between the home network and the visited network in real time. The Priority and preemption settings are sent over the S6a interface between the visited MME and the home HSS (subscriber database), and the S9 interface between the visited PCRF and the home PCRF (policy control functions).
>
> These signaling connections are in real time. The visited network always authenticates the visiting user over the S6a interface, but compliance with the visitor's home settings

is optional based on the negotiated agreement between the home network and the visited network. That is normal as visiting networks don't like to prioritize roamers over their own customers unless there is a specific agreement in place.

The PCRF and HSS have many degrees of QPP (100s of combinations) which can be shared between the visited network and the home network."

Respectfully submitted,

Stephen Whitaker
Montpelier, Vermont